

Application No. 10/691,272
Response dated: July 17, 2006
Reply to Office action of April 19, 2006

REMARKS

In response to the Office Action dated April 19, 2006, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-16 are pending in the present Application. Claims 1, 4, 7, 11, 12, 15 and 16 are amended leaving Claims 1-16 for consideration upon entry of the present amendments and following remarks.

Support for the claim amendments can at least be found in the specification, the figures, and the claims as originally filed. Particularly, the support for amended Claim 1 is at least found in originally filed Figures 1 and 2 and in the specification at page 6, lines 14-20 and page 8, lines 13 and 14.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Objections

Claims 4, 7, 11, 12, 15 and 16 are objected to because of various informalities. Applicants respectfully thank the Examiner for providing suggested language and herein amends Claims 4, 7, 11, 12, 15 and 16 accordingly. Reconsideration and withdrawal of the relevant claims objections is respectfully requested.

Claim Rejections Under 35 U.S.C. §102

Claim 1 is rejected under 35 U.S.C. § 102(b) as being anticipated by Hunka, U.S. Patent No. 4,114,034 (hereinafter "Hunka"). Applicants respectfully traverse.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

SUN-0031
SPX 200309-0010US

Page 6 of 12.

Application No. 10/691,272
Response dated: July 17, 2006
Reply to Office action of April 19, 2006

Amended Claim 1 recites:

"...a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being exposed to an outside of the case..."

In the Office Action, beam splitter 12/lens system 14 and support 11 of Hunka are considered as disclosing "the light guide" and the "sidewall" of the claimed invention.

Hunka discloses an optical system including a support 11, a beam splitter 12 and a lens system 14 which projects the image *from a viewing aperture 15* onto a photosensitive array. Col. 2, lines 19-23 and FIG. 1. The beam splitter 12 and the lens system 14 are totally contained in the housing 100/body 10/support 11 (considered as the "case" of the claimed invention). That is, no part of the beam splitter 12 and the lens system 14 is exposed to the outside of the housing 100/body 10/support 11. Therefore, Hunka does not disclose a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being exposed to an outside of the case of amended Claim 1.

Thus, Hunka does not disclose all of the limitations of amended Claim 1. Accordingly, Hunka does not anticipate amended Claim 1. Applicants respectfully submit that amended Claim 1 is not further rejected or objected and is therefore allowable. Reconsideration and allowance of Claim 1 is respectfully requested.

Claim Rejections Under 35 U.S.C. §103

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art and that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

Claims 2-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hunka in view of Son, U.S. Patent No. 6,741,234 (hereinafter "Son"). Applicants respectfully traverse.

SUN-0031
SPX 200309-0010US

Page 7 of 12.

Application No. 10/691,272
Response dated: July 17, 2006
Reply to Office action of April 19, 2006

Claims 2-6 variously depend from Claim 1 and inherit all of the limitations of Claim 1. As discussed above, Hunka does not teach all of the limitations of amended Claim 1, particularly a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being exposed to an outside of the case.

Son is relied upon as teaching "the light guide" is a "prism" of the claimed invention. Son discloses a total reflection prism for allowing light emitted from a light source and *irradiated through the irradiating lens* to be located on a path where totally reflected light upon the surface advances. (Abstract, Son.) The prism 30 as illustrated in FIG. 7 and described in Son at Col. 3, lines 44-51 is totally contained in the housing 26. That is, no part of the prism 30 is exposed to the outside of the housing 26. Therefore, Son also does not teach or suggest a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being exposed to an outside of the case of amended Claim 1 and does not remedy the deficiencies of Hunka.

Thus, Hunka and Son, alone or in combination, do not teach or suggest *all of the limitations* of amended Claims 2-6. Accordingly, *prima facie* obviousness does not exist regarding Claims 2-6 with respect to Hunka and Son.

Since Hunka and Son fail to teach or suggest all of the limitations of Claims 2-6, one of ordinary skill at the time of Applicants' invention would not have a motivation to modify or combine the references, or a reasonable likelihood of success in forming the claimed invention by the Examiner's suggestion of modifying or combining the reference. Thus, here again, *prima facie* obviousness does not exist. *Id.*

Thus, the requirements of *prime facie* obviousness are not met by the Examiner's suggestion to combine Hunka and Son. Applicants respectfully submit that Claims 2-6 are not further rejected or objected and are therefore allowable. Reconsideration and allowance of Claims 2-6 are respectfully requested.

Claims 7 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hunka in view of Seo, U.S. Patent No. 5,992,749 (hereinafter "Seo"). Applicants respectfully traverse.

Claims 7 and 8 variously depend from Claim 1 and inherit all of the limitations of Claim 1. As discussed above, Hunka does not teach all of the limitations of amended Claim 1,

SUN-0031
SPX 200309-0010US

Page 8 of 12.

Application No. 10/691,272
Response dated: July 17, 2006
Reply to Office action of April 19, 2006

particularly a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being exposed to an outside of the case.

Seo is relied upon as teaching "irradiating external light onto the worktable" of the claimed invention. Seo discloses a prism 60 upon which light reflected by a mirror 40 is incident and the prism 60 is *provided in* and fixed to the casing. (Col. 3, lines 48-50 and Figures 1, 5, 9 and 11. The prism 60 as illustrated and described in Seo is totally contained in the casing 11. That is, no part of the prism 60 is exposed to the outside of the casing 11. Therefore, Seo also does not teach or suggest a light guide disposed at a sidewall of the case to introduce external lights into the case, a portion of the light guide being exposed to an outside of the case of amended Claim 1 and does not remedy the deficiencies of Hunka.

Thus, Hunka and Seo, alone or in combination, do not teach or suggest *all of the limitations* of Claims 7 and 8. Accordingly, *prima facie* obviousness does not exist regarding Claims 7 and 8 with respect to Hunka and Seo.

Since Hunka and Seo fail to teach or suggest all of the limitations of Claims 7 and 8, one of ordinary skill at the time of Applicants' invention would not have a motivation to modify or combine the references, or a reasonable likelihood of success in forming the claimed invention by the Examiner's suggestion of modifying or combining the reference. Thus, here again, *prima facie* obviousness does not exist. *Id.*

Thus, the requirements of *prime facie* obviousness are not met by the Examiner's suggestion to combine Hunka and Seo regarding Claims 7 and 8. Applicants respectfully submit that Claims 7 and 8 are not further rejected or objected and are therefore allowable. Reconsideration and allowance of Claims 7 and 8 are respectfully requested.

Claims 9-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyon, U.S. Patent No. 4,521,772 (hereinafter "Lyon") in view of Perret, Jr., et al., (U.S. Patent No. 5,736,686 (hereinafter "Perret")). Applicants respectfully traverse.

Regarding Claims 9 and 13 in the Office Action, sensor cells 20/contrasting pattern 22 of Lyon is cited as disclosing the "light concentrating pad" of the claimed invention. At Page 7 of the Office Action, it is conceded that Lyon does not explicitly disclose the components of the light concentrating pad.

SUN-0031
SPX 200309-0010US

Page 9 of 12.

Application No. 10/691,272
Response dated: July 17, 2006
Reply to Office action of April 19, 2006

However, it is further stated that Perret discloses the components of the light concentrating pad of Claims 9 and 13. In the Office Action, top surface 49 and light guide 14 is considered as disclosing "the upper transparent plate" and "optical wave guide," respectively, of the claimed invention. Applicants respectfully disagree.

Firstly, Perret discloses a top *surface* 49 of the light guide are initially highly polished and the top *surface* 49 may be disturbed (adding material, such as an element pattern, or removing material, such as etching or deforming the surface) to cause light injected into the light guide 14 to be emitted therefrom in a predetermined pattern for even illumination. (Col. 4, lines 41-55 and FIG. 1.) That is, a disturbed surface 49 cannot be considered as "transparent." Therefore, Perret does not teach or suggest an upper transparent plate attached to a top of the optical wave guide for passing the light reflected from the lower reflecting plate of Claims 9 and 13.

Secondly, element 49 is merely a *top surface of the light guide 14*, as discussed above, and is *part of the light guide 14* itself. That is, top *surface* 49 cannot be considered a "plate" nor "attached to a top of the optical wave guide" of Claims 9 and 13. Therefore, Perret further does not teach or suggest an upper transparent plate attached to a top of the optical wave guide for passing the light reflected from the lower reflecting plate of Claims 9 and 13.

Thirdly, even if top surface 49 is considered as disclosing "the upper surface" of the claimed invention, Perret discloses a *black opaque mask 54* placed *on top of the light guide 14*, but underneath a diffuser 56. (Col. 5, lines 37-42 and FIG. 2.) Here, Perret further discloses that as shown in FIG. 1, the diffuser 56 is *placed on top of the light guide*. In either case, Perret specifically discloses a *black opaque mask 54* or a *diffuser 56* placed on top of the light guide. The *black opaque mask 54* or a *diffuser 56* cannot be considered as "transparent."

Applicants find no disclosure in Perret that the top surface 49 (discussed above), the black opaque mask 54 or the diffuser 56 are "transparent." Therefore, Perret further does not teach or suggest an upper transparent plate attached to a top of the optical wave guide for passing the light reflected from the lower reflecting plate of Claims 9 and 13.

Thus, Lyon and Perret, alone or in combination, do not teach or suggest *all of the limitations* of Claims 9 and 13. Accordingly, *prima facie* obviousness does not exist regarding Claims 9 and 13 with respect to Lyon and Perret.

Application No. 10/691,272
Response dated: July 17, 2006
Reply to Office action of April 19, 2006

Finally, Applicants further submit that there is no motivation to modify or combine Lyon and Perret to teach the claimed invention.

Perret relates to illumination systems and graphic digitizing tablets used by operators to trace drawings, prints, maps, photographs, etc.. (Col. 1, lines 14-19.) Perret discloses addressing needs of providing an improved surface-lighting system for *a digitizer tablet*. (Col. 2, lines 45-50 and Claim 1.) Applicants find no suggestion or motivation for using the illumination apparatus for a digitizer tablet described in Perret for an optical cursor control device or user-operated device of any kind. Therefore, there exists not motivation or suggestion to modify Lyon with the illumination apparatus of Perret to teach the claimed invention.

Since Lyon and Perret fail to teach or suggest all of the limitations of Claims 9 and 13 and that there exists no motivation to modify or combine Lyon and Perret, one of ordinary skill at the time of Applicants' invention would not have a motivation to modify or combine the references or a reasonable likelihood of success in forming the claimed invention by the Examiner's suggestion of modifying or combining the reference. Thus, here again, *prima facie* obviousness does not exist. *Id.*

Thus, the requirements of *prime facie* obviousness are not met by the Examiner's suggestion to combine Lyon and Perret regarding Claims 9 and 13. Applicants respectfully submit that Claims 9 and 13 are not further rejected or objected and are therefore allowable. Claims 10-12 and 14-16 variously depend from Claims 9 and 13, respectively, and are correspondingly allowable. Reconsideration and allowance of Claims 9-16 are respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

SUN-0031
SPX 200309-0010US

Page 11 of 12.

Application No. 10/691,272
Response dated: July 17, 2006
Reply to Office action of April 19, 2006

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

By: Amy Bizop-Copp
Amy Bizop-Copp
Reg. No. 53,993
CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115

Date: July 17, 2006